DATA LINE DRIVERS WITH COMMON REFERENCE RAMP DISPLAY

ABSTRACT

A video display driver applies a video signal to column electrodes of a liquid crystal display. The display driver includes a reference ramp generator and column data line drivers. Each data line driver includes a switching arrangement coupled to a first capacitance for storing a portion of the video signal in the first capacitance. A first terminal of the first capacitance is coupled to the reference ramp generator for combining a reference ramp signal with the stored video signal and for applying the combined signal to an input of a comparator. The comparator controls a transistor that couples a data ramp signal to a given column of the pixels. The reference ramp generator is coupled to the input of the comparator in a non-switched manner such that no switching transistor is interposed in a signal path between the reference ramp generator and the input of the comparator.

FIGURE 2